



DEPARTMENT OF TRANSPORTATION
HAZARDOUS MATERIALS REGULATIONS BOARD
WASHINGTON, D.C. 20590

8502

[49 CFR Parts 172, 173]

[Docket No. HM-49; Notice 70-10]

TRANSPORTATION OF HAZARDOUS
MATERIALS

Dimethyl Ether in Cargo Tanks

The Hazardous Materials Regulations Board is considering amending the Department's Hazardous Materials Regulations to authorize the transportation of dimethyl ether, a flammable compressed gas, in specifications MC 330 and MC 331 cargo tanks.

This proposal is based on a petition submitted by the Bureau of Explosives at the request of the Compressed Gas Association and upon the satisfactory experience gained under the terms of special permits over the past several years. The Board is advised that many cargo tank shipments have been made under these special permit provisions during which time no reports of adverse experience have been received by the Department.

The petitioner has proposed a minimum design pressure of 265 psig for the cargo tanks. However, the Board believes that cargo tanks having a minimum design pressure of 200 psig are adequate for this service. This is based on the vapor pressures of dimethyl ether at 115°F. and 130°F. which are approximately 151 psia and 187 psia, respectively. Section 173.315 (c) (1) of the regulations states that the vapor pressure (psig) at 115°F. must not exceed the design pressure of the cargo tank.

In consideration of the foregoing, it is proposed to amend 49 CFR Parts 172 and 173 as follows:

I. Part 172 would be amended as follows:

In § 172.5 paragraph (a) the Commodity List would be amended as follows:

§ 172.5 List of explosives and other dangerous articles.

(a) * * *

Article	Classed as—	Exemptions and packing (see sec.)	Label required if not exempt	Maximum quantity in 1 outside container by rail express
Dimethyl ether.....	Change F.G.....	173.306, 173.304 173.314, 173.315.	Red Gas.....	300 pounds.
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II. Part 173 would be amended as follows:

In § 173.315 paragraph (a) (1) Table would be amended, Note 16 would be added; paragraphs (h) (2) Table, and (i) (2) Table would be amended as follows:

§ 173.315 Compressed gases in cargo tanks and portable tank containers.

(a) * * *

(1) * * *

Kind of gas	Maximum permitted filling density		Specification container required	
	Percent by weight (see Note 1)	Percent by volume (see par. (f) of this section)	Type (see Note 2)	Minimum design pressure (p.s.i.g.)
Dimethyl ether (see Note 16).....	59	See Note 7.....	MC 330, MC 331...	200
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NOTE 16: Specifications MC 330 and MC 331 cargo tanks must be equipped with emergency discharge controls that comply with § 178.337-11(c) of this chapter.

(h) * * *

(2) * * *

Kind of gas:

Permitted gauging device

Dimethyl ether..... None.

(i) * * *

(2) * * *

Kind of gas:

Minimum start-to-discharge pressure (p.s.i.g.)

Dimethyl ether..... 200

Interested persons are invited to give their views on this proposal. Communications should identify the docket number and be submitted in duplicate to the Secretary, Hazardous Materials Regulations Board, Department of Transportation, 400 Sixth Street SW., Washington, D.C. 20590. Communications received on or before July 30, 1970, will be considered before final action is taken on the proposal. All comments received will be available for examination by interested persons at the Office of the Secretary, Hazardous Materials Regulations Board, both before and after the closing date for comments.

This proposal is made under the authority of sections 831-835 of Title 18, United States Code, and section 9 of the Department of Transportation Act (49 U.S.C. 1657).

Issued in Washington, D.C., on May 26, 1970.

F. C. TURNER,
Federal Highway Administrator.

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8:45 a.m.]